July 11, 1960

Dear Doc:

Re: OX

As you realize the projected use of SO-243 by Rod may raise some problems on our part particularly as concerns processing and printing. It would appear that entirely new chemistry may be required. The Research Labs are now conducting an investigation to determine possible recommendations.

The solution to the processing problems may be along one or more lines:

- 1. Utilization of existing equipment as is (upgraded as per previous letters in which we are still awaiting authorization from you).
- 2. Utilization of existing equipment with relatively minor modifications such as heat exchangers, machine drives, additional tanks etc.
- 3. Utilization of the web process which would involve new equipment.
- 4. Entirely new methods of processing involving radically new processing machines.

We, of course, would strive to solve the problem to require as little capital expenditure as possible and at same time without forcing P-E to make undesirable compromises in the operation of their equipment. But there is no doubt in my mind that their requirements will push us to the limit, particularly in refinements in the control of large scale (production) processing.

Undoubtedly, we will have to make numerous experiments following recommendations from the Research Labs. These will involve developer preparation, developer distribution, temperatures, machine speeds, allowable variations in all factors etc. This will be true even if we find that we can utilize existing equipment. And if changes in equipment are required even more experimentation will be necessary as well as design and fabrication.

Another major problem will be that of duplicating this purportedly extremely high resolution film. We have started to examine this problem too and I am almost certain that new printers will be required and perhaps new film.

It also appears probable that new exploitation equipment will be needed.

What all of this is going to cost cannot be estimated at 25X1A
this time until we have a better idea of the possible solutions.
My present guess is that experimentation and the establishment
of a process utilizing existing equipment might cost from
within PO-660 and for film, etc., 25X1A
under FP-1054. The new equipment, if required, might run from
exclusive of exploitation equipment. Art and
his people will have to decide what they need and what they would
like us to provide for this last item.

ELG/MDG cc: J.L.B. C.F.H.

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